FACT SHEET

as required by LAC 33:IX.3109 for **major** LPDES facilities, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0041769; AI 19535; PER20080001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:**

City of Jennings
City of Jennings Wastewater Treatment Facility
P.O. Box 1249
Jennings, LA 70546

II. **PREPARED BY:** Eura DeHart

DATE PREPARED: March 27, 2009

III. **PERMIT ACTION:** reissue LPDES permit LA0041769, AI 19535; PER20080001

LPDES application received: April 25, 2008

EPA has not retained enforcement authority.

LPDES permit issued: July 11, 2003
LPDES permit effective: August 1, 2003
LPDES permit expires: July 31, 2008

IV. FACILITY INFORMATION:

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the City of Jennings.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located on Hickory Lane in Jennings, Jefferson Davis Parish.

D. The treatment facility utilizes the Biolac treatment process including a flow equalization basin, grit removal system, extended aeration, final clarification, UV disinfection, post aeration, and sludge dewatering by belt filter press.

E. Outfall 001

Discharge Location: Latitude 30° 14' 10" North
Longitude 92° 38' 00" West

Description: treated sanitary wastewater

Design Capacity: 2.5 MGD

Type of Flow Measurement which the facility is currently using:
Combination Totalizing Meter / Continuous Recorder

V. RECEIVING WATERS:

The discharge is into an unnamed stream, thence into Bayou Nezpique, thence into the Mermentau River in segment 050301 of the Mermentau River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of the unnamed stream is 0.1 cfs.

The **hardness value** is 33.5 mg/l and the **fifteenth percentile value for TSS** is 8.7 mg/l.

The designated uses and degree of support for Segment 050301 of the Mermentau River Basin are as indicated in the table below[1/]:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

[1/]The designated uses and degree of support for Segment 050301 of the Mermentau River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 050301 of the Mermentau River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Eura DeHart
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 050301, Bayou Nezpique – Headwaters to Mermentau River, is not listed on LDEQ's Final 2006 303(d) List as impaired. However, subsegment 050301 was previously listed as impaired for organic enrichment/low DO, pathogen indicators, suspended solids/turbidity/siltation, nutrients, and phosporous, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 050301:

Organic Enrichment / Low DO and Nutrients

The *Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including WLAS for Nine Treatment Facilities* was revised by LDEQ in October 1999. The *Bayou Nezpique TMDL for Nutrients* was finalized by EPA on May 3, 2001. These TMDLs established seasonal limitations for the City of Jennings Wastewater Treatment Facility. These limitations are 5 mg/l $CBOD_5$ / 2 mg/l NH_3-N / 6 mg/l DO during the summer months (March – November) and 5 mg/l $CBOD_5$ / 5 mg/l NH_3-N / 6 mg/l DO during the winter months (December – February).

Pathogen Indicators

As per the *Bayou Nezpique and Bayou Castor Fecal Coliform TMDL*, "...there will be no change in the permit requirements based upon wasteload allocations resulting from this TMDL." Therefore, fecal coliform effluent limitations will remain as previously permitted.

Suspended Solids, Turbidity, and Siltation

As per the *TMDL for TSS, Turbidity, and Siltation for the Mermentau River Basis*, point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required. TSS limitations will remain as previously permitted.

Final Effluent Limits:

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.*	Weekly Avg.*	Basis
$CBOD_5$	104	5 mg/l	7.5 mg/l	Limits are set in accordance with the *Bayou Nezpique Watershed TMDL for Dissolved Oxygen* revised in October 1999 by LDEQ. Also, the *Bayou Nezpique TMDL for Nutrients* was finalized on May 3, 2001, USEPA Region 6.
TSS	313	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen				Limits are set in accordance with the *Bayou Nezpique Watershed TMDL for Dissolved Oxygen* revised in October 1999 by LDEQ. Also, the *Bayou Nezpique TMDL for Nutrients* was finalized on May 3, 2001, USEPA Region 6.
March – November	42	2 mg/l	4 mg/l	
December - February	104	5 mg/l	10 mg/l	
Dissolved Oxygen**	N/A	6.0 mg/l	N/A	Limits are set in accordance with the *Bayou Nezpique Watershed TMDL for Dissolved Oxygen* revised in October 1999 by LDEQ.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD_5 and TSS in terms of concentration.

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Toxicity Characteristics

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, April 16, 2008, Version 6).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0041769, **Biomonitoring Section** for the organisms indicated below.

TOXICITY TESTS	FREQUENCY
Chronic static renewal 7-day definitive test using Ceriodaphnia dubia	1/quarter
Chronic static renewal 7-day definitive test using Pimephales promelas	1/quarter

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 31%, 41%, 55%, 73%, and 97%. The critical biomonitoring dilution and WET limit is defined as 97% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the **Biomonitoring Section** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in the **Biomonitoring Section** of the permit.

The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2383. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0041769: Issued: July 11, 2003
Expired: August 1, 2008

Final Limits:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
$CBOD_5$	5 mg/l	7.5 mg/l	2/week	6 Hr. Composite
TSS	15 mg/l	23 mg/l	2/week	6 Hr. Composite
Ammonia-Nitrogen				
March - November	2 mg/l	4 mg/l	2/week	6 Hr. Composite
December - February	5 mg/l	10 mg/l	2/week	6 Hr. Composite
Dissolved Oxygen	6 mg/l	---	2/week	Grab
Fecal Coliform Colonies	200	400	2/week	Grab
pH	6.0 (min)	9.0(max)	2/week	Grab

The permit contains biomonitoring with a WET limit of 97%.
The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the most recent inspection of this facility was performed on March 26, 2008. The following observations were made:

- Numerous permit excursions were noted for Ammonia-Nitrogen levels, CBOD, and Fecal Coliform.
- Plant is in the process of replacing air diffusers.
- Thermometers, calibration sheets, buffers, and chain-of-custody in order
- City currently conducting smoke testing and making repairs to sewer lines
- Samples were not being properly composited.
- Site tour, flow check with 6.3% error, and DMR calculation was conducted for TSS 2/08 with no AOCs.

B) Compliance and/or Administrative Orders

A review of the files indicates that an Amended Consolidated Compliance Order & Notice of Potential Penalty (Enforcement Tracking No. WE-CN-07-0051A) was issued to the facility on May 22, 2008 for:

- permit excursions reported on DMRs between May 2007 and January 2008
- failure to submit a noncompliance report for CBOD exceedance that occurred during November 2007
- failure to submit a permit renewal application 180 days prior to the expiration date of the LPDES permit

C) DMR Review

A review of the discharge monitoring reports for the period beginning December 1, 2006 through November 30, 2008 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
Ammonia, Loading	001	January 2007	42 lbs/day	79.162 lbs/day
Ammonia, Monthly Average	001	January 2007	2 mg/l	5.092 mg/l
Ammonia, Weekly Average	001	January 2007	4 mg/l	10.55 mg/l
Ammonia, Loading	001	February 2007	42 lbs/day	44.56 lbs/day
Ammonia, Monthly Average	001	February 2007	2 mg/l	3.58 mg/l
Ammonia, Weekly Average	001	February 2007	4 mg/l	9.10 mg/l
Ammonia, Loading	001	March 2007	42 lbs/day	155.29 lbs/day
Ammonia, Monthly Average	001	March 2007	2 mg/l	9.77 mg/l
Ammonia, Weekly Average	001	March 2007	4 mg/l	11.50 mg/l
Ammonia, Loading	001	April 2007	42 lbs/day	134.786 lbs/day
Ammonia, Monthly Average	001	April 2007	2 mg/l	8.031 mg/l
Ammonia, Weekly Average	001	April 2007	4 mg/l	13.95 mg/l
Ammonia, Loading	001	October 2007	42 lbs/day	82.01 lbs/day
Ammonia, Monthly Avg.	001	October 2007	2 mg/l	8.01 mg/l
Ammonia, Weekly Avg.	001	October 2007	4 mg/l	22 mg/l
CBOD, Monthly Avg.	001	October 2007	5 mg/l	6.1 mg/l
Ammonia, Loading	001	November 2007	42 lbs/day	82.01 lbs/day
Ammonia, Monthly Avg.	001	November 2007	2 mg/l	7.61 mg/l
Ammonia, Weekly Avg.	001	November 2007	4 mg/l	13.65 mg/l
Ammonia, Weekly Avg.	001	November 2007	4 mg/l	11.55 mg/l
CBOD, Weekly Avg.	001	November 2007	7.5 mg/l	9.0 mg/l
Ammonia, Weekly Avg.	001	December 2007	4 mg/l	13.3 mg/l
Fecal Coliform, Monthly Avg.	001	January 2008	200 mg/l	TNTC mg/l
Fecal Coliform, Weekly Avg.	001	January 2008	400 mg/l	TNTC mg/l
Dissolved Oxygen, Minimum	001	March 2008	6 mg/l	Not reported

XII. ADDITIONAL INFORMATION:

In accordance with LAC 33:IX.2707.C, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

b) Controls any pollutant not limited in the permit; or

c) Requires reassessment due to change in 303(d) status of waterbody; or

d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 2.5 MGD.

Effluent loadings are calculated using the following example:

CBOD: 8.34 lb/gal x 2.5 MGD x 5 mg/l = 104 lbs/day

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between **1.00** and **5.00** MGD.

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
$CBOD_5$	2/week	6 Hr. Composite
Total Suspended Solids	2/week	6 Hr. Composite
Ammonia-Nitrogen	2/week	6 Hr. Composite
Dissolved Oxygen	2/week	Grab
Fecal Coliform Bacteria	2/week	Grab
pH	2/week	Grab
Biomonitoring		
Ceriodaphnia dubia	1/quarter	24 Hr. Composite
Pimephales promelas	1/quarter	24 Hr. Composite

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

Environmental Impact Questionnaire:

The facility did not respond to the Environmental Impact Questionnaire on the basis that the facility is not a new major facility and the existing major facility is not applying for a substantial modification to the permit.

Applicant Comments/Responses (verbatim from applicant)

1. Have the potential and real adverse effects of the proposed facility been avoided to the maximum extent possible?

   N/A

2. Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?

   N/A

3. Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing nonenvironmental benefits?

   N/A

4. Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing nonenvironmental benefits?

   N/A

5. Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing nonenvironmental benefits?

   N/A

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Fact Sheet.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, City of Jennings, City of Jennings Wastewater Treatment Facility, April 25, 2008.